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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,948	09/13/2000	Thomas K. Fehring	8881-1A	7387

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EXAMINER

WESSMAN, ANDREW E

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 12/05/2001

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,948

Applicant(s)

FEHRING ET AL.

Examiner

Andrew E Wessman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 17-22 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: In the specification, page 5, line 22 for example, "greater than about 120" is lacking the units of measurement for the value of 120. Please include units with numerical values where appropriate.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 21, it is unclear what value "a yield strength of greater than about 120" is claiming, as there are no units of measurement for the value of 120. Please include units of measurement for all appropriate numerical values. For the purposes of examining the claims on the merits, it is assumed from the specification that the claim was meant to be for a yield strength of 120 ksi.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 17-21 rejected under 35 U.S.C. 102(e) as being anticipated by Stinson.

Stinson anticipates the invention substantially as claimed. Stinson discloses a biocompatible Co-Cr-Mo alloy (col. 3, lines 36-38) that can be free of carbon and nitrogen, which would also be free of carbide and nitride particles (col. 5, lines 21-45). The contents of the Stinson alloy are also the same as alloys shown in the specification of the instant alloy having no other second phase particles, so it would be assumed that the Stinson alloy would also be inherently free of second phase particles.

In regards to the feature of claim 19, that the alloy is forged, Stinson also discloses forging the alloy (col. 5, lines 46-49).

In regards to the feature of claim 20, that the alloy has a hardness greater than about 40 R_c, Stinson also discloses that the alloy has hardnesses between 46.2 R_c and 48.7 R_c (col. 6, lines 37-40).

In regards to the feature of claim 21, that the alloy has a yield strength greater than 120 ksi, the alloys of Stinson are disclosed to have a yield strength of 361 ksi (col. 5, lines 63-64).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson.

In regards to the feature of claim 22, the instant invention claims a grain size finer than ASTM 10. While Stinson does not specifically teach a grain size finer than ASTM 10, Stinson teaches an alloy with the same composition as the claimed invention, and that the alloy can be forged as in the claimed invention. The alloy of Stinson has yield strength and hardness properties similar to the claimed invention in the cold worked state, and so it would be expected that the grain size would also be similar. Stinson also teaches that the alloys can be heat treated (col. 6, lines 4-5), and heat treating metal alloys is well known in the art to produce grain sizes finer than before the heat treatment. It would have been expected that the grain sizes of the Stinson alloy would have been finer than ASTM 10.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Herchenroeder et al. discloses a ductile cobalt-base alloy primarily for high temperature applications.

Prasad et al. discloses cobalt-chromium alloys for use in dental prosthetics.

Crook et al. discloses corrosion and wear resistant cobalt alloys.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew E Wessman whose telephone number is (703)305-3163. The examiner can normally be reached on Monday through Friday, 8:30am to 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703)308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

AEW
November 29, 2001

ROY KING *R-KING*
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700